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Kasra Rafi and **Yvon Verberne*** (yvon.verberne@mail.utoronto.ca), Department of Mathematics, University of Toronto, 40 St. George Street, Room 6290, Toronto, ON M5S 2E4, Canada. *Strong contractibility of geodesics in the mapping class group.*

A geodesic is strongly contracting if its nearest point projection takes disjoint balls from the geodesic to sets of bounded diameter, where the bound is independent of the ball. In joint work with Kasra Rafi, we show that the quasi-axis of a pseudo-Anosov homeomorphism in the mapping class group may not have the strong contractibility property. In particular, we show that it is possible to choose an appropriate generating set for the mapping class group of the five-times punctured sphere so that there exists a pseudo-Anosov homeomorphism ϕ , a sequence of points x_k , and a sequence of radii R_k so that the ball $B_{R_k}(x_k)$ is disjoint from the quasi-axis of ϕ , but for any projection map the diameter of the image of $B_{R_k}(x_k)$ to the quasi-axis grows like $\log(R_k)$. Along the way, we show that it is, in fact, possible to construct explicit geodesics in the mapping class group. (Received January 28, 2019)